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STRATEGY RESEARCH PROJECT

TRANSFORMING THE ARMY SUSTAINING BASE

BY

LIEUTENANT COLONEL DANNY G. NOBLES
United States Army

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ABSTRACT

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The Army has embarked on its transformation venture. The goal is to provide an agile, but lethal force that is capable of rapid deployment to any area of the world where America's interests are threatened. The metamorphosis that began with the Army Chief of Staff's vision will make the Revolution in Military Affairs a true revolution. Army Transformation will revolutionize the fundamental organizational structure and equipment, as well as warfighting doctrine. However, the transformed Army (including active and reserve components) will create new and different demands on the infrastructures that support power projection, training, maintenance, force protection, and quality of life. Those demands must be anticipated and posts, camps, and stations developed to support those needs. A transformed sustaining base is necessary in order to support a transformed Army.

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TRANSFORMING THE ARMY SUSTAINING BASE

In an October 1999 address to the Association of the United States Army, General Eric Shinseki revealed a new vision to transform the most powerful army in the world into a force capable of maintaining its relevance well into the 21st Century. The Army's transformed "Objective Force" must be more sustainable than current light forces, more deployable than existing heavy forces, and yet possess a capability and lethality that will remain unmatched by any other nation's military. With its vision articulated, the U.S. Army embarked on its transformation venture that will revolutionize fundamental organizational structure and equipment, as well as warfighting doctrine. All of these changes will demand a new way of doing business at posts, camps, and depots. The transformed Army will place new and different demands on the infrastructure that must support power projection, training, maintenance, force protection, and quality of life. These demands must be anticipated, and installations must be enabled to support those needs. The ability of organizations to anticipate, self-organize, and effectively perform missions in the face of changing environments is a key characteristic of transformation.² A transformed sustaining base will be necessary in order to support a transformed army. Unfortunately, there has been little dialogue concerning necessary infrastructure changes within the army sustaining base as a part of transformation. Transformation will require more than the installation-level approach that has been taken in the past. The entire base support structure must change at every level. The intent of this paper is to describe the current sustaining base, consider the effectiveness of past and present management practices, and recommend concepts to transform installation management into a system that best serves the army and the nation.

THE LANGUAGE OF TRANSFORMATION

There is a language of transformation that consists of unique terms and phrases that must be understood before the subject can be discussed. Words and phrases such as linear and nonlinear, equilibrium and far-from-equilibrium, self-organizing and organizational intelligence describe the transformation process. Sharing a common language enables organizations to change. Michael McMaster, reengineering consultant for major corporations, such as BMW and ARCO, and author of <u>The Intelligence Advantage</u> said, "to begin to change anything, we must change the way we speak about it."

First, consider the characteristics of linearity and non-linearity. Linear systems are both additive and proportional. The sum is equal to the parts; that is, the system can be broken down into subparts and then reconstructed to get the same outcome each time. Thus, linear systems are consistent. Linear systems behave according to the economic rule of "constant returns to scale," making these types of systems predictable. However, linear systems tend to resist change. They lack the internal ability to recognize changes in the surrounding environment and become obsolete without external intervention. Consider a freight train as an example. The train, with its massive weight, stands idly on a set of tracks. To change its stable or equilibrium condition, a locomotive must generate enough power to overcome the resistance of the stationary train cars before the train can begin to move smoothly down the track at a given speed. This works well until the train encounters the need to change. The inertia of the system works against its ability to switch tracks, slow down, or stop and change directions. Any change in the momentum of the train requires extra power from the locomotive to overcome the system's resistance to change.⁶ These conditions exist in rigidly hierarchical structures today. They often work efficiently and effectively in stable environments. However, change is met with resistance that consumes much energy from the organization.

A nonlinear organization, on the other hand, seeks change due to its internal structure. It is designed to change. Consider water as a nonlinear example. At room temperature, water is at its equilibrium with its molecules densely packed in a liquid state. However, the molecules rapidly spread out from one another as the temperature is raised to change the equilibrium condition. When the heat is increased to the boiling point, transformation occurs. The far-from-equilibrium change in the environment enables the water to change from its liquid state into steam, and the result is a tremendous release of energy. The energy increases exponentially to the degree of heat applied. Steam can perform a myriad of tasks from powering engines to generating electricity. Likewise, the key to "managing" nonlinear organizations is to unlock the synergistic potential for change by creating the right conditions. In nonlinear systems, the whole is greater than the sum of the parts.⁸

The self-organizing feature of transformation also occurs as water is heated. The temperature of the water varies depending on its proximity to the heat source. Water density also varies with temperature differences. The differences in temperature and density create currents that transfer energy through the various layers. Likewise, nonlinear organizational structures form and reform to communicate information in the most efficient and effective manner. Rather than resisting change, nonlinear organizations use change to unlock their potential.

An organization that enables rapid communication of ideas throughout its structure produces a culture of organizational intelligence. It encourages a flow of information about environmental changes and responsive actions to be taken throughout the organization. Transformed organizations develop fully integrated networks of intelligence throughout their structure. Organizational transformation occurs as the corporation recognizes changes in the environment and adapts its organization to efficiently and effectively respond. The challenge of transformation is to change current linear structures that sufficiently fulfilled past requirements into dynamic nonlinear organizations that will meet the ambiguous challenges of the future.

Transformation discussions commonly revolve around technology and new advanced weapon systems. However, these discussions limit the perspective of transformation. It is much more fundamental than new "things." It is a nonlinear phenomenon that enables an organizational intelligence capable of receiving, analyzing, and responding to information. Transformed organizations respond to changing conditions of the external environment and self-organize (transform) to take advantage of all available resources, thereby maximizing their potential for success. Understanding these few concepts provides a framework to focus further discussion on the army-sustaining base.

FOCUS ON THE SUSTAINING BASE

Perhaps the main reason there has been so little discussion concerning sustaining base transformation is that the subject is simply not exciting. Army Transformation debates have focused on doctrine, combat force structure, revolutionary weapons systems, and emerging technology. These are valid discussions; the army's reason for being continues to be its ability to fight and win the nation's wars. However, since base operations are a key link to army readiness, the United States risks the ability to project and sustain the force if it fails to consider the army sustaining base. Defense analysts tend to be obsessed with the "point of the spear" which, in isolation, is not an effective weapon. The point requires a spear shaft to give the weapon its balance and stability in flight, and to sustain its energy as it strikes its target. The army sustaining base, comprised of installations and depots, along with their requisite commands and staffs responsible for managing the sustaining base, is analogous to the shaft of the spear.

Army Sustaining Base management starts with the Office of the Assistant Chief of Staff for Installation Management (ACSIM). The ACSIM is responsible for programming infrastructure requirements and resources, as well as preparing guidance and policies for the Department of the Army. The sustaining base includes staffs at the Major Army Commands (MACOMs) that

promulgate installation management policies and distribute base operations resources to installations. The installations where army units are stationed, and where soldiers and their families live and work, complete the army-sustaining base network. The role of the army-sustaining base is to provide an efficient and effective infrastructure that includes power projection platforms, training bases and centers, camps, and depots located around the world. Looking at one part of the structure requires considering all levels of base support operations. For the purpose of this article, installation management, base support operations, and sustaining base management are interchangeable terms. Whatever the term, they have one clear fact in common – this is a big investment!

THE BUSINESS OF INSTALLATION MANAGEMENT

Installation management is an expensive and complex enterprise. According to the Association of the United States Army's published analysis of the Army's fiscal year 2001 budget, more than 28% of the annual budget supports installation management programs. The majority of these funds were consumed in the operations, maintenance, repairs, and utilities costs associated with operating the virtual cities known as installations. In the current fiscal year, more than \$6.3 billion was required for this operations and maintenance function. Another \$400 million was invested in environmental protection and mitigation projects. New military construction projects consumed \$1 billion. Another \$1 billion was invested in army family housing projects. The remaining budget for installation management (approximately \$11 billion in fiscal year 2001) was used for other operating costs, including pay to civilian employees. Installation management is a large capital venture, yet it is a necessary investment in the ability of the army to house, train, equip, project, and sustain the force in a safe and protected environment. The role of the installation is fundamentally more essential than ever in the era of army transformation.

Dialogue about installation management must address three legitimate questions. What does the army get from its substantial investment? Is this investment managed in the most efficient and effective manner possible? What can be done to transform the sustaining base?

THE SUSTAINING BASE – A FOUNDATION FOR READINESS

The return on the army's sustaining base investment is recognized in an infrastructure that enables force readiness. Military readiness is measured in three key areas: personnel, equipment, and training. Garrison commanders, staffs, and facilities enable units to maintain each facet of readiness. The sustaining base provides facilities and services for soldier

readiness processing to review and update soldiers personnel files and personal records, as well as medical teams to insure that soldiers are physically fit to fight. Maintenance facilities, ammunition storage sites, and rail stations where equipment is loaded and deployed to ports of debarkation are managed at the installation level. Installation managers maintain qualification ranges, maneuver training sites and classrooms. These are only a few examples of installation contributions to readiness. The global nature of the modern army demands a sustaining base capable of equipping, training, projecting, and sustaining forces at home and abroad.

Base operations funds are budgeted to manage 116 Army posts, camps and depots around the world. There are approximately 166,000 facilities within those installations. (These numbers do not include the numerous Army Reserve Centers and Army National Guard Armories existing in communities across America. Installations serve a common goal; each one contributes to equipping, training, sustaining, and projecting a trained and ready force anywhere and anytime it is required. Some posts serve as training centers for basic training, advanced soldier training, or officer skill training. Some installations, such as Fort Irwin and Fort Polk, provide for maneuver training exercises. Depots provide for specialized supply or maintenance activities. Still other sites are home to various technical laboratories, such as the Waterworks Experimental Station in Vicksburg, Mississippi and the Construction Engineering Research Laboratory at Champaign, Illinois. Other installations, such as Fort Hood, Fort Bragg, and Fort Campbell, are base installations for combat forces and serve as power projection platforms from which the Army projects its forces when ordered to deploy into contingency operations.

Installations are as unique as the units that occupy them, and regions of the world where they are located. Labels that describe the general functions of installations can mislead people. Titles such as training posts, power projection, or power support platforms may cause someone to erroneously think such installations are mirror images of one another. Consider Fort Hood and Fort Bragg. Both are large power projection platforms, yet the characteristics and requirements of the tenant organizations make them very different installations. Fort Hood is home to III Corps headquarters, as well as two heavy maneuver divisions (1st Cavalry and 4th Infantry Divisions). Their training and deployment requirements are very different from the training and deployment requirements of the XVIII Corps or the 82nd Airborne Division at Fort Bragg. Likewise, both Fort Leonard Wood and Fort Jackson are training posts, yet each is characterized by different skills and various levels of training requirements. The tenant organizations on installations, the communities that surround them, and the local environment all contribute to make each installation unique. These unique characteristics create different

challenges that require tailored organizations and creative solutions based on ever changing requirements. Although installations may perform similar functions, no two are alike. A former ACSIM enjoyed saying, "when you've seen one installation, you've seen one installation."

MANAGING THE SUSTAINING BASE

The army has struggled to properly manage its installations ever since the American Revolution when General Washington sought to create a strategic defensive system of fortified posts to command key positions. As American interests in the frontiers grew, the army expanded westward to protect those interests. The management of its garrisons and forts became more challenging, and the challenges more complicated. Past army initiatives have attempted to deal with the challenge of managing installations as efficiently as possible. Little attention has been given to improve the effectiveness of the programs, policies and resourcing provided by the upper areas of the sustaining base.

Installation management proponents experimented with methods and systems to efficiently operate the Army's infrastructure. In this process, attempts have been made to regulate the organization of garrison staffs, realign functions, and dispose of installations. Private industry has been leveraged to contract for services that were traditionally provided by government employees. Sophisticated computer models have been developed to help depict the condition of facilities and forecast operational costs. These initiatives yielded various degrees of success. Some have demonstrated the potential to enable transformation, while others have fallen short of the mark.

The Army tried to establish an efficient organizational structure by taking a cookie cutter approach when it published Army Regulation 5-3, Installation Management and Organization, in 1978. That regulation provided a generic organization and functions manual for all army installations. Garrisons were to establish staff organizations with Directorates for Personnel and Community Activities (DPCA), Plans, Training and Mobilization (DPTM), Logistics (DOL), Engineering and Housing (DEH). These directorates loosely related to the G-1, 2, 3, 4, and special staff of a maneuver division. This structure had been useful in combat, but proved to be less effective for a "city management" type of operation performed by garrison commanders.

The ACSIM, realizing that installations vary widely, rescinded the old regulation and replaced it Field Manual 100-22, Installation Management. This manual described general functions performed by installations.¹⁷ Installations took the opportunity to experiment with a variety of staff structures. Fort Bragg and Fort Campbell adopted a business center approach that combined common activities such as military police, fire, and ambulance into a public safety

business center. The contracting office, civilian personnel, and resource management activities were integrated into a common installation business office. Other related functions were also combined. Fort Hood took a different approach and leveraged Corps-level assets with garrison responsibilities; for example, the DPTM was combined with the Corps G-3, and the Corps Support Command was tasked to provide ammunition storage and control functions. Fort Leonard Wood separated its personnel functions from the community activity functions, establishing both a Directorate of Military Personnel and a Directorate of Community and Family Activities. These examples illustrate that there can be many possible solutions to any given problem. The common denominator in all of these examples is the ability of the local commander to recognize which activities and services are necessary to fulfill the mission, and then to establish an organization capable of adapting to new or changing demands.¹⁸

A separate initiative that impacted garrison operations was privatization. For more than two decades, senior defense leaders have sought reduce the size of government overhead by obtaining private contracts for installation functions that could be performed by commercial industry. Programs to privatize sustaining base functions have been called a variety of names: Commercial Activities, A-76 (taken from the OMB Circular A-76, Commercial Activities), and Competitive Sourcing. The privatization process requires installations to compare the inhouse (civil service) work force operating costs to the cost of contracting for the same services through private industry. Garrisons must prepare a performance work statement that specifies the tasks, conditions, and standards required for the service being studied. Proposals are solicited from private firms. The organization (e.g. Directorate of Logistics, Public Works, etc.) must then reengineer its workforce in accordance with the work statement and attempt to establish itself as the Most Efficient Organization (MEO). The "best value", the lowest comparative cost between the government and private proposals, is selected.²⁰

The premise of reengineering an organization to maximize efficiency is a worthy goal. However, effectiveness must not be compromised in the process. The civil service workforce contributes more to the organization than simply the basic skills for which they were employed. The most important contribution they provide is their ability to receive information from their working environment (customers, fellow employees, community, etc.), interpret that information according to the organization vision, generate flexible options, and make decisions. In others words, government employees are more valuable for their intelligence than their job descriptions. Individual intellect is fundamental to developing the network of organizational intelligence that is required for transformation.²¹ The civilian component of the Army is a dedicated, loyal, and enduring resource. They perform the duties that they were hired to do on

the installation, as well as many other "duties as assigned" that are never measured by accountants and human resource managers. These dedicated professionals, from warehouse workers to road maintenance crews to budget analysts, are loyal ambassadors of the army to their communities. Their innovations and suggestions contribute to the continuous improvement of the posts, camps, and depots where they work. When a private firm replaces government labor, that 'in-house" intelligence resource is lost. People will continue to perform the required tasks specified in the terms of a negotiated contract with a company that depends on a profit margin. However, the people will do those tasks as employees whose allegiance is to the contractor.

The budgeting process for the Army's sustaining base is another challenge. As the Army proponent for installations, the ACSIM distributes the resources budgeted by the Department of the Army through the Major Army Commands to the various installations. Using a system known as AIM-HI, the ACSIM determines what base operations costs should be, based on the tenant units' organizations, and the number and types of facilities located on the installations. Generally, AIM-HI calculates costs by comparing the real property inventory (list of the facilities on an installation) to the strengths of tenant organizations. The tenants' authorized square footage of facilities is deducted from the real property inventory. That calculation usually shows that an installation has more square footage than is authorized for the units. The excess square footage is deducted from the overall real property inventory to provide the programmed inventory. The smaller programmed inventory figures are used for budget analysis purposes.

Numerous algorithms are used by AIM-HI to establish projected square foot costs for various facility categories. The projected costs are applied to the programmed inventory to establish the basic base operations funding budget-level for an installation (see

figure 1).

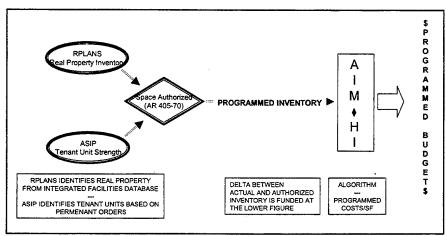


FIGURE 1. AIM-HI FLOW DIAGRAM

The costing models used by ACSIM do not reflect the requirement realities at the installation level. Different management systems with greater ability to determine all of the costs associated with a service or activity are required to support intelligent decision-making and to

determine budget requirements. There is an alternative to the traditional manufacturing approach to costing that is reflected by AIM-HI. Operational management tools, such as activity based costing and service based costing have been adopted by innovative leaders in industry.

These cost management systems are designed to recognize change in both external markets and internal operations, and provide information concerning the impact of those changes on quality and costs of an activity or service. Activity Based Management (ABM) provides more accurate cost picture by

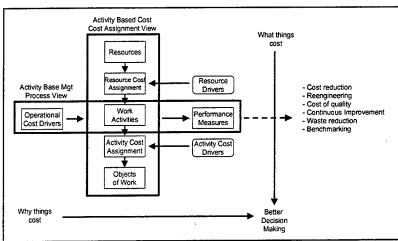


FIGURE 2. ACTIVITY-BASED MANAGEMENT MODEL

identifying cost drivers (e.g. labor-hours, machine hours, etc.) and measuring the performance output of the activity (see figure 2).²³ The value of these costing methods is that they measure how well activities are performed (the effectiveness and efficiency of activities), and the total production costs of those activities.²⁴ Sustaining base leaders make better decisions when they know what things costs and why.

Some installations have incorporated activity and service based costing measures into their resource management activities. Fort Hood implemented ABM to gain the insight and flexibility needed to transform its garrison operations to meet its requirements. True costs of services must be known in order to make informed reengineering decisions. This method of tracing cost sources associated with each activity helps to discover opportunities for cost improvements. Identifying improvement opportunities is crucial to developing and building a continuous improvement plan.²⁵ Pittsburgh University Business Professor Narcyz Roztocki recommends using ABM when four conditions exist: overhead is high, products (services) are diverse, costs of errors are high, and competition is stiff.²⁶ Those criteria certainly apply to army installation management.

Another tool developed by the ACSIM was the Installation Status Report (ISR). That system was needed to help commanders articulate the conditions of their facilities, environmental programs, and installation services to higher headquarters.²⁷ The ISR was patterned after the unit status reports that are familiar to combat unit leaders. Part 1 of the ISR measures quantity and quality of various types of facilities at each installation. Quantity is measured against

current mission requirements. The quality measurement, based on a published standard developed by the U.S. Army Corps of Engineers, provides a fair picture of the existing conditions of the infrastructure. What this system does not provide is the ability to anticipate future requirements. There are no methods to determine what projects are required to increase the infrastructure mission readiness. Part 2 of the ISR provides an excellent management tool for identifying and monitoring efforts to restore, secure, and protect the environment at individual installations. Part 3 of the ISR (Services) attempts to establish a minimum level of a common set of services that should be provided at any installation. Unfortunately, identifying and defining services provided by the sustaining base, and establishing conditions and standards to measure those services has been a difficult task. This segment of the ISR remains under development.

A major improvement in sustaining base management came in 1993 when the Army Community of Excellence (ACOE) program adopted the Malcomb Baldridge criteria for organizational excellence as its means of evaluating quality at army installations. Before 1993, ACOE was used to entice installations to improve their physical appearance. As a result, street signs were painted brown and rocks were painted white. Inspection teams were given "red carpet" treatment as they judged installations on appearance and a very subjective evaluation of customer service.

When ACOE developed the Army Performance Improvement Criteria (APIC) based on Malcomb Baldridge measures, it created a structure for managing and measuring performance planning, assessment, and training. The criteria stressed the importance of an integrated quality system that included leaders, employees, and customers working together to improve performance and service. Furthermore, APIC did not assume that all installations were the same. It did not prescribe rigid techniques that demanded conformance to a cookie cutter set of rules. The criteria provided a framework for management to use in organizing for change. It offered a means for assessing performance against demonstrated quality. It established a common language to encourage dialogue within and without the sustaining base community.²⁸ It provided a non-linear approach to reengineering sustaining base management at the installation level. In short, APIC is a structure for Sustaining Base Transformation.

Some of the past installation management approaches, particularly privatization and resource management initiatives, fail to support transformation. They lack the flexibility and organizational intelligence to factor in local conditions, anticipate changes, and respond to emerging requirements associated with a transforming army. These are the very conditions that McMaster warns against in his book, <u>The Intelligence Advantage: Organizing for Complexity</u>.

When organizations are managed as machines and systems are engineered linear structures, guidance and communications become very hierarchical and directional. Under these conditions, McMaster wrote, "There is no allowance for creativity or intelligent reaction to unpredictable changes in the environment." With further refinement, other initiatives (such as the ACSIM, ISR, and APIC) provide a sound base to begin transforming the sustaining base.

TRANSFORMATION OBSTACLES

A quick look at the ACSIM web site reveals numerous initiatives to improve the efficiency of installations, but there are some institutional obstacles to transformation. The current ACSIM position on installation management is described in an information paper entitled "Reengineering the Installation Garrison." That paper provides an excellent description of ongoing challenges at the installation level. It discusses the changing nature of the world and the army. The paper also describes garrison organizations with rigid stovepipe functional structures that are inefficient and resistant to change. It concludes that garrisons must change to better focus their energies on core competencies. However, the attitude and focus of the paper itself demonstrates two of the major obstacles to achieving sustaining base transformation. First, the paper reveals a prevalent attitude in the installation management community when the writer states "Installation garrisons are businesses." In fact, garrisons are not businesses any more than city governments are businesses. Garrisons are service providing organizations and tactical-level caretakers of army infrastructure. Army leaders would never consider demanding that a maneuver brigade radically change the way it fights without also changing doctrine and the support structure if necessary. Neither should they expect an installation to change itself without considering the entire sustaining base structure. The tone and focus of the ACSIM paper illuminates the second obstacle to transformation – the tendency to focus solely at the installation level. The accepted opinion of many sustaining base leaders is that the key to fixing the sustaining base management problems is at the installation level. They seem to think that if installations can be made more efficient, problems of costly overhead, tight budgets, and poor customer service will be solved.

There have been innovative improvements at installations throughout the army. Even though garrisons are not businesses, there are potential benefits to be gained from utilizing relevant business practices. There is still unexplored room for improving garrison operations. However, it is time to analyze and reengineer every level of the installation management structure.

TRANSFORMING THE SUSTAINING BASE

The transformation vision recognizes the potential for many different outcomes.³² Army transformation depends on an organizational structure that maximizes communications and encourages dialogue that will recognize change and make instant innovative responses.³³ It is a nonlinear development with unpredictable results, yet it is not chaos.³⁴ It requires a special form of leadership and structure. The leader's role is to establish a flexible structure that can recognize shifts in external conditions and empower the organization to respond effectively. The organization's structure must be permeable to allow the organization to recognize environmental changes and communicate necessary actions, but strong enough to maintain integrity of purpose and focus on the organization's vision.

Organizational intelligence is a key enabler of transformation. The organizational intelligence of the installation is imbedded in its workforce. The knowledge and innovation that each member contributes is critical to the network of intelligence in the organization. Privatization eliminates the fundamental resource of intelligence: the in-house workforce. Private industry has discovered how valuable individuals are for reengineering. David Gonzales, director of physical facilities at the University of California, Santa Barbara, stated the preferred position of the Association of Higher Education Facilities Officers when he wrote that "contracting is not an option" for maintenance employees in the University of California system.³⁵ Certainly contracts can be negotiated to perform functions, but the loyalty and mental innovation of in-house employees cannot be replaced.

Another requirement to enable transformation is to change the budgeting process. Installation operations must be resourced through a nonlinear budgeting system. The costing model currently used is a traditional, linear cost analysis approach to resource management. That system is not capable of rapidly recognizing and providing for the ambiguous changes that occur at installations. A new costing approach is necessary to enable the sustaining base to transform. The ISR can provide the first step toward fully implementing ABM throughout the sustaining base. For example, installation services are defined and minimum standards are identified in part 3 of the ISR. Costing measures could be applied to the services identified in the ISR and used for ABM and budget planning.

A key vehicle for transforming the sustaining base is APIC. However, it must be vastly expanded beyond the installation-level. After more than seven years of emphasis on performance improvement, sustaining base leaders continue to struggle with an obsolete and aging infrastructure. The shortfall should not be blamed on APIC itself. The problem has been a shortsighted implementation of the criteria. Senior leaders applied this reengineering tool to

one level of the installation management system (the installations themselves) while ignoring the remainder of the components (MACOMs and HQDA). It is time to imbed the APIC framework throughout the sustaining base system, from the installation up to the ACSIM, and reengineer the entire installation management structure. APIC should be de-linked from the ACOE program. ACOE served a useful role in generating interests in reengineering and improving base operations. However, it has become known as a competition among installations rather than a tool for self-improvement. There is a general perception that the ACOE selection process has been politicized. The time has come to eliminate ACOE and use its funds to defray base support costs.

A final point to consider as a means toward Sustaining Base Transformation is that of reengineering the entire installation management community. The ACSIM could be dual-hatted, similar to the Surgeon General or the Chief, Corps of Engineers. In a staff capacity, the ACSIM would continue to serve as the principal installation management advisor to the Chief of Staff. Additionally, the ACSIM would serve as the Commanding General of a newly created Sustaining Base Command. All garrisons would report directly to that command. This would relieve the Major Army Commands (MACOMs) of their responsibility for installation management and permit them to focus on their Title 10 responsibilities of ensuring that trained and ready forces are available for deployment. The Sustaining Base Command would be a new MACOM to ensure that army installations support force readiness. The command would be capable of distributing resources directly for budgeted requirements. A flatter organization in the installation management community improves communications and dialogue. Local information would be disseminated throughout the sustaining base community without delay or reinterpretation by numerous layers of command structures.

CONCLUSION

The sustaining base of the transformed Army will be challenged to provide training facilities and ranges, maintenance facilities, and support structures to deploy and sustain the highly mobile objective force. This will require flexible installation organizational structures capable of recognizing changing requirements, and rapidly responding to those requirements. Only the total transformation of every installation management area will result in the needed ability to adapt to new demands and changes.³⁶ Innovative leaders must guide flexible, intelligent organizations that are constantly striving for excellence. The Chief of Staff of the Army has boldly rallied the army to embrace change and transform itself into a land force of sustained relevance. The transformed Army (including active and reserve components) will create new

and different demands on the infrastructures that support power projection, training, maintenance, force protection, and quality of life. Those demands must be anticipated and posts, camps, and stations developed to support those needs. A transformed sustaining base is necessary in order to support a transformed Army.

WORD COUNT = 5277

ENDNOTES

- ¹ Eric Shinseki, "Address to Eisenhower Luncheon, 45th Annual Meeting of AUSA," 12 October 1999; available from http://www.tradoc.army.mil/transformation; Internet; accessed 20 December 2000.
- ² Jeffrey Goldstein, The Unshackled Organization (Portland: Productivity Press, 1994), 37-39.
- ³ Michael D. McMaster, <u>The Intelligence Advantage: Organizing for Complexity</u> (Boston: Butterworth-Heinemann, 1996) 31.
- ⁴ Goldstein, 32.
- ⁵ Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredicatability of War," <u>International Security</u>, Volume 17, No. 3 (Cambridge: MIT Press, 1992) 62.
- ⁶ Goldstein, 10.
- ⁷ Ibid, 69.
- ⁸ Ibid. 24.
- ⁹ Ibid, 45.
- ¹⁰ McMaster, 64.
- ¹¹ Wolf Kutter, et al., <u>Fiscal Year 2001 Army Budget; An Analysis</u> (Arlington: AUSA, 2000), 48, 85-87.
- ¹² Robert Van Antwerp, Jr., "Fiscal Year 2001 National Defense Authorization Act Real Property Congressional Testimony"; available from http://commdocs.house.gov/committees/security/has061030.000/has061030_0.htm; Internet; accessed 21 December 2000.
- ¹³ The Army Reserve reported facilities in 835 separate communities; the Army National Guard reported facilities in 2,797 communities. <u>Reserve Component Programs</u>, Reserve Forces Policy Board Report (Washington, D.C.: U.S. Department of Defense, March 1999), 129.
- ¹⁴ Department of the Army, <u>Reception, Staging, Onward Movement, and Integration</u>, Field Manual 100-17-3 (Washington, D.C.: U.S. Department of the Army, 17 March 1999), 14.
- ¹⁵ David H. Whaley, Major General (Retired), U.S. Army, personal conversations, 1998.
- ¹⁶ Russell Weigley, <u>The American Way of War</u> (Bloomington: Indiana University, 1973) 8.
- ¹⁷ Department of the Army, <u>Installation Management</u>, Field Manual 100-22 (Washington, D.C.: U.S. Department of the Army, 11 October 1994).
- ¹⁸ Goldstein, 37-39.

- ¹⁹ U.S. Army War College, <u>How the Army Runs</u> (Carlisle: U.S. Army War College, 1999), 17-11.
- ²⁰ "A-76 Studies," available from http://www.hqda.army.mil/acsimweb/ca/igapend.htm; Internet; accessed 25 December 2000.
- ²¹ McMaster, 11.
- ²² "BASOPS Business Rules," available from http://www.hqda.army.mil/acsimweb/ops/BASOPS%20Business%20Rules.doc; Internet; accessed 25 December 2000.
- ²³ Timothy S. White, <u>The 60 Minute ABC Book: Activity-Based Costing for Operations</u>
 <u>Management</u>, (Bedford, TX: Consortium for Advanced Manufacturing International, 1997) 19.
- ²⁴ Malcolm Smith, "Managing your ABC System: Activity-Based Costing," <u>Management Accounting</u>, April 1994, pp. 46-47.
- ²⁵ Robert W. Kohler, "Triple-Threat Strategy," <u>Management Accounting</u>, October 1991, pp. 30-34.
- ²⁶ "Activity Based Costing," available from http://www.pitt.edu/~roztocki/abc/abctutor/index.htm; Internet; accessed on 26 December 2000.
- ²⁷ "Installation Status Report," available from http://isr.xservices.com; Internet; accessed 24 December 2000.
- ²⁸ Daniel J. Cleary, "Army Performance Improvement Criteria Executive Development." Briefing slides with scripted commentary, Washington, D.C., Office of the Chief, Army Reserve, 5 December 1998.
- ²⁹ McMaster, 6.
- ³⁰ "Reengineering the Installation Garrison," available from http://www.hqda.army.mil/acsimweb/ops/rgi.htm; Internet; accessed 21 December 2000.
- ³¹ "Reengineering the Installation Garrison".
- ³² McMaster, 183.
- ³³ Ibid, 135.
- ³⁴ Goldstein, 51.
- ³⁵ David Gonzales, "It Takes a Revolution A Case Study of Facilities Service Improvements at UCSB," available from http://www.appa.org/fmep; Internet; accessed 21 December 2000.
- ³⁶ Goldstein, 37-39.

BIBLIOGRAPHY

"Activity Based Costing." Available from http://www.pitt.edu/~roztocki/abc/abctutor/ index.htm>. Internet. Accessed 26 December 2000.

Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredicatability of War," International Security 17, No. 3: 62.

"A-76 Studies." Available from http://www.hqda.army.mil/acsimweb/ca/igapend.htm. Internet. Accessed 25 December 2000.

"BASOPS Business Rules." Available from http://www.hqda.army.mil/acsimweb/ops/ BASOPS%20Business%20Rules.doc>. Internet. Accessed 25 December 2000.

Cleary, Daniel J. "Army Performance Improvement Criteria Executive Development." Briefing slides with scripted commentary, Washington, D.C., Office of the Chief, Army Reserve, 5 December 1998.

Cutler, William G. <u>History of the State of Kansas.</u> available from http://www.ukans.edu/carrie/kancoll/books/cutler/leavenworth/leavenworth-co-p2.html. Internet. Accessed 22 December 2000.

Daniel, Wayne and Carol Schmidt. "Fort Concho." 15 February 1999. Available from http://www.tsha.utexas.edu/handbook/online/articles/view/FF/qbf11.html. Internet. Accessed 22 December 2000.

David Gonzales, "It Takes a Revolution - A Case Study of Facilities Service Improvements at UCSB," available from http://www.appa.org/fmep. Internet. Accessed 21 December 2000.

Goldstein, Jeffrey. The Unshackled Organization (Portland: Productivity Press, 1994).

"Installation Status Report." Available from http://isr.xservices.com. Internet. Accessed 24 December 2000.

Kohler, Robert W. "Triple-Threat Strategy," <u>Management Accounting</u>, October 1991: 30-34.

Kutter, Wolf, et al. Fiscal Year 2001 Army Budget; An Analysis. (Arlington: AUSA, 2000).

McMaster, Michael D. <u>The Intelligence Advantage: Organizing for Complexity</u> (Boston: Butterworth-Heinemann, 1996).

Shinseki, Eric. "Address to Eisenhower Luncheon, 45th Annual Meeting of AUSA." 12 October 1999. Available from http://www.tradoc.army.mil/transformation. Internet. Accessed 20 December 2000.

Smith, Malcolm. "Managing your ABC System: Activity-Based Costing," <u>Management Accounting</u>, April 1994: 46-47.

Timothy S. White, <u>The 60 Minute ABC Book: Activity-Based Costing for Operations Management</u>, (Bedford, TX: Consortium for Advanced Manufacturing International, 1997)

"Reengineering the Installation Garrison." Available from http://www.hqda.army.mil/acsimweb/ops/rgi.htm. Accessed 21 December 2000.

- U.S. Army War College, How the Army Runs (Carlisle: U.S. Army War College, 1999).
- U.S. Department of the Army, <u>Reception, Staging, Onward Movement, and Integration</u>. Field Manual 100-17-3. Washington, D.C.: U.S. Department of the Army 17 March 1999.
- U.S. Department of the Army, <u>Installation Management</u>, Field Manual 100-22 Washington, D.C.: U.S. Department of the Army 11 October 1994.
- U.S. Department of Defense, <u>Reserve Component Programs</u>, Reserve Forces Policy Board Report. Washington, D.C.: U.S. Department of Defense March 1999.

Van Antwerp, Robert, Jr. "Fiscal Year 2001 National Defense Authorization Act Real Property Congressional Testimony" Available from http://commdocs.house.gov/committees/security/has061030.000/has061030_0.htm. Internet. Accessed 21 December 2000.

Weigley, Russell. The American Way of War (Bloomington: Indiana University, 1973).